

**Montana Board of Oil and Gas Conservation
Environmental Assessment**

Operator: Thor Resources, Inc.
Well Name/Number: Thor Kevin HZ#30
Location: NW NW Section 29 T34N R2W
County: Toole MT; Field (or Wildcat) Kevin Sunburst

Air Quality

(possible concerns)

Long drilling time: No, 7 to 14 days drilling time.

Unusually deep drilling (high horsepower rig): No

Possible H₂S gas production: Slight.

In/near Class I air quality area: No Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: No special concerns

Water Quality

(possible concerns)

Salt/oil based mud: No, air, air mist drilling system to be used.

High water table: No high water table anticipated.

Surface drainage leads to live water: No live water nearby.

Water well contamination: No, no water wells within 1 mile of this location.

Porous/permeable soils: No, silty sandy bentonite soils.

Class I stream drainage: No Class I stream drainages.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☐ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: _____

Comments: 400' of surface casing cemented to surface adequate. No potable groundwater or surface water in this area.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

High erosion potential: No minor cut or fill required.

Loss of soil productivity: No, location will be restored after drilling if nonproductive. If productive unused portion of drill site will be reclaimed.

Unusually large wellsite: No, 350'X350' location size required.

Damage to improvements: Slight, surface use is dry land cultivated (CRP) field.

Conflict with existing land use/values: Slight

Mitigation

- ☐ Avoid improvements (topographic tolerance)
- ☐ Exception location requested
- ☒ Stockpile topsoil
- ☐ Stream Crossing Permit (other agency review)
- ☒ Reclaim unused part of wellsite if productive
- ☐ Special construction methods to enhance reclamation
- ☐ Other _____

Comments: No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: None nearby- I15 to East 1.5 miles

Possibility of H2S: Slight

Size of rig/length of drilling time: Small drilling rig/short drilling time.

Mitigation:

- ☐ Proper BOP equipment
- ☐ Topographic sound barriers
- ☐ H2S contingency and/or evacuation plan
- ☐ Special equipment/procedures requirements
- ☐ Other: _____

Comments: No concerns.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species Listed threatened or endangered species in Toole County is the Black Footed Ferret.

Mitigation:

- ☐ Avoidance (topographic tolerance/exception)
- ☐ Other agency review (DFWP, federal agencies, DSL)
- ☐ Screening/fencing of pits, drillsite
- ☐ Other: _____

Comments: Surface is private cultivated land. No concerns.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified.

Mitigation

- ☐ avoidance (topographic tolerance, location exception)

X other agency review (SHPO, DSL, federal agencies)

Other: _____

Comments: Surface is private cultivated land. No concerns.

Social/Economic

(possible concerns)

 Substantial effect on tax base

 Create demand for new governmental services

 Population increase or relocation

Comments: No concerns. Existing oil field, Kevin Sunburst Oil & Gas

Field.

Remarks or Special Concerns for this site

Well is a horizontal Nisku Formation test well in the Kevin Sunburst Oil & Gas Field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected, some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Thomas Richmond

(title:) Administrator

Date: January 27, 2014

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency) _____

Toole County water wells

(subject discussed) _____

January 27, 2014

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____